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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,496	02/21/2001	Hidemasa Yasuda	0879-0298P	6755

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EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/788,496	<b>Applicant(s)</b> YASUDA, HIDEMASA	
	<b>Examiner</b> John M. Villecco	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Regarding claims 1 and 2, applicant has amended the claims to include the limitation of correcting the video signals according to the determined brightness level without lowering an SN ratio. Claims 1 and 2 are apparatus claims. Thus, the claims have to differentiate themselves from the prior art in terms of structure rather than function. Therefore, the limitation of correcting the video signals without lowering a SN ratio does not have to be met. Since, the circuit of Lee meets all of the structural limitations of the claim, the rejections of claims 1-3 will be maintained.
2. Applicant has added new claims 5-12. Please see the office action on the following pages for a discussion of claims 5-12.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (U.S. Patent No. 5,546,134).**

5. Regarding *claim 1*, Lee discloses an apparatus for correcting the brightness of an image signal. More specifically, Lee discloses an average picture level (APL) calculator (20) for

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determining the brightness of the image signal and a look-up table (30) for correcting the video signal according to the calculated brightness value. See column 4, line 65, to column 5, line 11. Additionally, Lee discloses that the correction of the video signal is done to correct signals picked up by cameras and displayed by a display. See column 1, lines 19-24.

6. As for *claim 2*, Lee discloses an apparatus for correcting the brightness of an image signal. More specifically, Lee discloses an A/D converter (10) which acts as the signal processing part, an average picture level (APL) calculator (20) for determining the brightness of the image signal, and a look-up table (30) for determining a correction amount and correcting the video signal according to the brightness value. See column 4, line 65, to column 5, line 11. Additionally, Lee discloses that the correction of the video signal is done to correct signals picked up by cameras and displayed by a display. See column 1, lines 19-24.

7. With regard to *claim 3*, Lee discloses an A/D converter (10) for converting the signals into digital signals and a D/A converter (40) for converting the corrected signal to an analog signal. The video signal is corrected before being D/A converted.

8. Regarding *claim 5*, Lee discloses an embodiment in Figure 5 that does not includes a variable gain amplifier.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**10. Claims 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Christoff et al. (U.S. Patent No. 6,518,998).**

11. Regarding *claim 10*, Christoff discloses a camera that is capable of adjusting the brightness of an image signal by offsetting the image signal. More specifically, Christoff discloses a camera that includes an imager (108), a D/A converter (132), a video monitor (116), and signal processing circuitry (112) that includes an amplifier (120), an A/D converter (124), a DSP (126), and a controller (136). As disclosed in column 3, line 65 to column 4, line 7, a brightness of the incoming image signal is calculated and an image signal is corrected according to the brightness value. The image signal is then sent to the video monitor (116) after being corrected. The correction is performed by offsetting the brightness levels of the video signals by a correction value.

12. *Claim 11* is considered substantively equivalent to claim 10. Please see the discussion of claim 10 above.

13. As for *claim 12*, Christoff discloses a camera that is capable of adjusting the brightness of an image signal by offsetting the image signal. More specifically, Christoff discloses a camera that includes an imager (108), a D/A converter (132), a video monitor (116), and signal processing circuitry (112) that includes an amplifier (120), an A/D converter (124), a DSP (126), and a controller (136). As disclosed in column 3, line 65 to column 4, line 7, a brightness of the incoming image signal is calculated and an image signal is corrected according to the brightness value. The image signal is then sent to the video monitor (116) after being corrected. The correction is performed by offsetting the brightness levels of the video signals by a correction

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value. Since the black level correction (138) is performed in the digital signal processor (DSP, 128) the correction is performed without lowering a SN ratio.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (U.S. Patent No. 2004/0165070) in view of Christoff et al. (U.S. Patent No. 6,518,998).**

16. Regarding *claim 6*, Yoshida discloses a camera (10) that includes a lens (12), a diaphragm (50), an image sensor (52), an image signal processing circuit that includes an analog processing circuit (54), an A/D converter (56), a digital signal processing circuit (58), a gamma correcting circuit, a YC signal generating circuit, and a D/A converter (78), a display (28) for displaying images output from the digital signal processing circuit (58), and a CPU. See paragraph 0053. The CPU (66) and control circuit (74) operate to control the diaphragm of the camera in response to the processed video signals. The CPU (66) serves as the display controlling circuit.

Yoshida, however, fails to explicitly disclose that the camera includes a microcomputer connected to an EEPROM for controlling the diaphragm, shutter speed, and brightness of the image signal. Christoff, on the other hand, discloses a camera that is capable of adjusting the brightness of an image signal by offsetting the image signal. More specifically, Christoff

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discloses a camera that includes an imager (108), a D/A converter (132), a video monitor (116), and signal processing circuitry (112) that includes an amplifier (120), an A/D converter (124), a DSP (126), and a controller (136). As disclosed in column 3, line 65 to column 4, line 7, a brightness of the incoming image signal is calculated and an image signal is corrected according to the brightness value. The image signal is then sent to the video monitor (116) after being corrected. The correction is performed by offsetting the brightness levels of the video signals by a correction value. The controller (136) controls the shutter speed of the imager (108). Based upon the calculated brightness value being below a threshold value, a correction value for the black level is obtained from the table. See Figure 3.

Christoff, however, fails to disclose that the tables are stored in an EEPROM. Official Notice is taken, however, that EEPROM's are well known in the art for storing data. One of ordinary skill in the art would have recognized that an EEPROM would provide an excellent way of accessing the data stored in the tables shown in Figure 3.

17. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (U.S. Patent No. 2004/0165070) in view of Christoff et al. (U.S. Patent No. 6,518,998) and further in view of Eino (U.S. Patent No. 6,120,435).**

18. Regarding *claim 7*, as mentioned above in the discussion of claim 6, both Yoshida and Christoff disclose the limitations of the parent claim. However, neither of the aforementioned reference discloses the use of a switch to select between a correction mode and a non-correction mode. Eino, on the other hand discloses a method of adjusting the brightness of an image, wherein a button (25A) is used to implement the brightening procedure. See Figure 3.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a switch in order to implement the brightness correction so that a user may manually select the desired brightness of the image.

***Allowable Subject Matter***

19. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claim 8**, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a variable gain amplifier which is controlled by the microcomputer to provide an optimum gain value falling within an effective gain range provided by a data table within the EEPROM and which does not permit a lowering of the SN ratio.

**21. Claim 4 is allowed.**

22. The following is an examiner's statement of reasons for allowance:

Regarding claim 4, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a gain controlling part that controls a gain of the variable gain amplifier according to the brightness level of the video signals, wherein the gain of the variable gain amplifier is controlled to an optimum gain value falling within an effective gain range and which does not permit a lowering of an SN ratio.



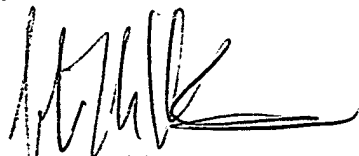
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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John M. Villecco  
January 24, 2005



TUAN HO  
PRIMARY EXAMINER